# Appendix C Wildlife Information Sources ———

# Terrestrial and Freshwater Species

## Multiple Species Groups

- Conservation Planning Program—California Department of Fish and Game http://www.dfg.ca.gov/hcpb/conplan/conplan.shtml
   Information about Natural Community Conservation Planning, federal Habitat Conservation Planning, and conservation and mitigation banking.
- Recovery and Delisting of Federal Endangered Species
   http://endangered.fws.gov/recovery/index.html
   Information about federally listed endangered species, including online recovery plans; Endangered Species Act-related conservation tools, laws and policies, and Federal Register notices.
- California Plants and Animals
   http://www.dfg.ca.gov/hcpb/species/species.shtml
   General plant and animal information, lists of special species (threatened and endangered, species of concern, etc.), life history and conservation status information, survey standards and guidelines, threats to species, and photographs.
- California Wildlife Habitat Relationships—California Department of Fish and Game http://www.dfg.ca.gov/whdab/html/cwhr.html
   A state-of-the-art information system for California's wildlife that provides information on life

history, management, and habitat relationships for 675 species of amphibians, reptiles, birds, and mammals known to occur in the state.

 California Natural Diversity Database—California Department of Fish and Game http://www.dfg.ca.gov/whdab/html/cnddb.html
 The most comprehensive statewide inventory of locational records of California's most imperiled species and natural communities.

 UC Berkeley Museum of Vertebrate Zoology http://mvz.berkeley.edu

A university research and education center for the biology of amphibians, reptiles, birds, and mammals. Site provides online data about specimen locations, as well as information about the museum's collections and research activities and links to other biological databases and specimen collections.

CalPhotos: Animals
 http://elib.cs.berkeley.edu/photos/fauna
 Approximately 5,000 online images of California animals.

## Bird-specific

 North American Bird Conservation Initiative http://www.nabci-us.org/nabci.html

A continental conservation effort to integrate bird conservation efforts. Site provides online access to existing bird conservation plans, habitat joint ventures, priorities of individual initiatives and programs, species-specific information (assessments, life history, useful identification tips, species lists, population and habitat data), monitoring programs, and mapping tools supporting bird conservation.

Habitat Joint Ventures in the United States
 http://www.nabci-us.org/jvmap.html
 Directory to the five California Joint Ventures (Central Valley, Intermountain West, Pacific Coast, San Francisco Bay, and Sonoran).

California Riparian Habitat Joint Venture—Partners in Flight
 http://www.prbo.org/calpif/htmldocs/rhjv
 A collaborative effort by 18 federal, state, and private organizations to protect and enhance
 habitats for native landbirds throughout California. Site provides access to the California Riparian
 Conservation Plan.

• Southern Pacific Shorebird Conservation Plan—Partners in Flight http://www.prbo.org/cms/index.php?mid=212&module=browse

A conservation plan that describes species and habitat priorities and goals, threats, recommendations for management, monitoring, research, and education.

Landbird Conservation Plans—Partners in Flight
 http://www.prbo.org/cms/index.php?mid=3&module=browse
 California-specific plans for bird habitat in coniferous forest, coastal scrub, grassland, oak woodland, shrubsteppe and Sierra Nevada.

 Important Bird Areas of California—Audubon California http://ca.audubon.org/IBA.htm

Information about 150 key areas in California that are most important to birds. Coordinated within the state by Audubon California, this program is part of a worldwide effort coordinated by BirdLife International to identify and protect sites deemed most critical to birds.

California's Wildlife—Birds
 http://www.dfg.ca.gov/whdab/html/lifehistbirds.html
 Life history descriptions for all native California birds.

ORNIS (ORNithological Information System

http://ornisnet.org

A collaborative network of databases from ornithological collections in 32 North American natural history museums.

# Mammal-specific

California's Wildlife—Mammals
 http://www.dfg.ca.gov/whdab/html/lifehistmammal.html
 Life history descriptions for all native California mammals.

Mammal Species of Special Concern
 http://www.dfg.ca.gov/hcpb/species/ssc/sscmamml/sscmamml.shtml
 1986 Department of Fish and Game publication Mammalian Species of Special Concern in California, by
 D.F. Williams. The list of mammalian species of special concern is currently undergoing review.
 An updated listing and status accounts is expected 2006.

Bat Conservation International

http://www.batcon.org/

An organization with the mission to protect and restore bats and their habitats worldwide.

Western Bat Working Group (WBWG)

http://www.wbwg.org/wbwg.htm/

A partner in the Coalition of North American Bat Working Groups. The WBWG comprises agencies, organizations and individuals interested in bat research, management, and conservation from 13 western states and the provinces of British Columbia and Alberta.

Mammal Networked Information System

http://elib.cs.berkeley.edu/manis

A collaborative network of databases from mammal collections in natural history museums, with approximately 10,300 California specimens from 17 institutions.

## Reptile- and Amphibian-specific

- California's Wildlife—Amphibians
   http://www.dfg.ca.gov/whdab/html/amphibians.html
   Life history descriptions for all native California amphibians.
- California's Wildlife—Reptiles
   http://www.dfg.ca.gov/whdab/html/reptiles.html
   Life history descriptions for all native California reptiles.
- Amphibian Species of Special Concern http://www.dfg.ca.gov/hcpb/species/ssc/sscamphb/sscamphib.shtml
   Species accounts from Jennings and Hayes, Amphibian and Reptile Species of Special Concern in California, 1994.
- Reptile Species of Special Concern http://www.dfg.ca.gov/hcpb/species/ssc/sscreptl/sscreptl.shtml
   Species accounts from Jennings and Hayes, Amphibian and Reptile Species of Special Concern in California, 1994.
- Partners in Amphibian and Reptile Conservation—Southwest
   http://www.parcplace.org/southwest.html
   A partnership dedicated to the conservation of the herpetofauna—reptiles and amphibians—and their habitats. Membership includes state and federal agencies, conservation organizations, museums, pet trade industry, nature centers, zoos, energy industry, universities, herpetological organizations, research laboratories, forest industries, and environmental consultants.
- HerpNET

http://www.herpnet.org

A collaborative network of databases from herpetological collections in natural history museums, with approximately 8,900 California specimens from 13 institutions.

## Inland Fish-specific

Ecosystem Restoration Program—California Bay Delta Authority
 http://calwater.ca.gov/Programs/EcosystemRestoration/Ecosystem.shtml
 A joint state-federal effort to initiate and coordinate ecosystem restoration actions for the San Francisco Bay and Sacramento—San Joaquin river system.

 Native Anadromous Fish and Watershed Branch—California Department of Fish and Game http://www.dfg.ca.gov/nafwb/index.html

A program that addresses the health of the state's anadromous fisheries and watersheds. Site provides information on life history, conservation plans, restoration activities and funding, and listing status of species.

• Southwest Region—National Marine Fisheries Service

http://swr.nmfs.noaa.gov

A program that addresses the management, regulation, harvesting, conservation, and protection of California's marine resources, including marine fish, invertebrates, and anadromous fish.

• Fish Species of Special Concern

http://www.dfg.ca.gov/hcpb/species/ssc/sscfish/sscfish.shtml

1995 Department of Fish and Game publication *Fish Species of Special Concern in California*, Second Edition, by P.B. Moyle, R.M. Yoshiyama, J.E. Williams, and E.D. Wikramanayake.

CalFish

http://www.calfish.org

Online access to data relating to California fish and aquatic habitat data, including population trends and counts, distributions, migration barriers, hatcheries, habitat restoration projects, genetics, and monitoring.

FishNet

http://speciesanalyst.net/fishnet/default.html

A collaborative network of databases from fish collections in 29 natural history museums.

## Inland Invertebrate-specific

- Department of Entomology—California Academy of Sciences http://www.calacademy.org/research/entomology
   One of the largest arthropod specimen collections in North America.
- Essig Museum of Entomology—University of California Berkeley http://essig.berkeley.edu/pages/about.htm
   Probably the largest existing specimen collection of California insects.

#### **Plants**

California Native Plant Society

http://www.cnps.org

A statewide nonprofit organization focused on California's native plants. Site provides online "Inventory of Rare and Endangered Plants" and information about conservation programs, legislative updates, education, science programs, and related publications.

 Jepson Herbarium—University of California Berkeley http://ucjeps.berkeley.edu

The only herbarium devoted exclusively to the study of California's native plants. Site provides access to a database of text data and images for over 300,000 California plant specimens.

The Jepson Manual

http://ucjeps.berkeley.edu/interchange/I\_treat\_indexes.html

The most comprehensive identification guide to nearly 8,000 taxa of native and naturalized California plants. Site provides access to species descriptions and keys to identification.

• CalPhotos: Plants

http://elib.cs.berkeley.edu/photos/flora

Approximately 42,000 online images of California plants.

#### Plant Communities

 Natural Resource Management Program—California State Parks http://www.parks.ca.gov/default.asp?page\_id=22197

A program to protect, restore, and maintain natural diversity on state park lands, with special units for prescribed fire, exotic species control, sensitive species management, and biological monitoring.

U.S. Forest Service Research Natural Areas in California
 http://www.fs.fed.us/psw/publications/documents/psw\_gtr188/gtr188index.html
 Descriptions of special areas on national forest land that represent both widespread and unique ecosystems and that are protected to maintain biological diversity and provide ecological baseline information, education, and research.

 Natural Reserve System—University of California http://nrs.ucop.edu

The world's largest university-operated system of natural reserves. It broadly represents California's rich ecological diversity and provides relatively undisturbed samples of the state's natural ecosystems and the facilities needed to support teaching and research.

 A Manual of California Vegetation http://davisherb.ucdavis.edu/CNPSActiveServer/index.html
 Descriptions and images of 275 vegetation series in California.

 California Wildlife Habitats—California Department of Fish and Game http://www.dfg.ca.gov/whdab/html/wildlife\_habitats.html
 Descriptions of the major wildlife habitats in California.

 Vegetation Classification and Mapping Program—California Department of Fish and Game http://www.dfg.ca.gov/whdab/html/vegcamp.html
 Program to facilitate and oversee efforts to develop accurate and scientifically defensible maps and classifications of vegetation and/or habitat throughout the state. Site provides links to other programs and activities related to California vegetation science.

- Vegetation Program—California Native Plant Society
   http://www.cnps.org/programs/vegetation/index.htm
   Program to coordinate CNPS involvement in improving classification and mapping of California's natural vegetation.
- CalPhotos: Landscapes and Habitats http://elib.cs.berkeley.edu/photos/landscape
   Approximately 2,400 online images of California landscapes and habitats.
- Ecological Subregions of California
   http://www.fs.fed.us/r5/projects/ecoregions
   Biophysical descriptions of all 220 geographical sections of the state, each approximately 450,000 acres in size. Descriptions include climate, lithology and stratigraphy, geomorphology, soils, surface water characteristics, vegetation, characteristic fauna, disturbance regimes, land use, and cultural ecology.
- California Biodiversity Council Vegetation Mapping Memorandum of Understanding
  http://www.ceres.ca.gov/biodiversity/vegmou.html
  A cooperative vegetation and habitat mapping initiative which will facilitate statewide joint data
  collection and processing, establish common mapping and classification standards across all
  ownerships, and provide timely response to both state and federal information and analytical
  requirements.

# Marine Species

# Multiple Species Groups

• California Current Joint Venture

http://www.prbo.org/cms/index.php?mid=231&module=browse

An ecosystem-level conservation plan that will define a conservation agenda for the California Current System (CCS), focusing on top predators (including but not limited to seabirds), and their prey.

 Marine Life Protection Act Initiative http://www.dfg.ca.gov/mrd/mlpa/index.html

A cooperative public-private partnership to expand, fund, and manage a system of marine protected areas along the California coast. Site provides MLPA formal documents, species information, and information about scientific activities, public outreach, and existing marine protected areas.

 Priority Conservation Areas—Baja California to the Bering Sea (B2B) Project http://www.mcbi.org/marineprotected/Marine.htm#PCA

Report describing critical marine habitat areas along the Pacific Coast. Prepared by the Marine Conservation Biology Institute as part of the Commission for Environmental Cooperation's North American Marine Protected Area Network.

 Ocean Resources Management Program—California Resources Agency http://resources.ca.gov/ocean/index.html

Statewide program to ensure comprehensive and coordinated management, conservation, and enhancement of California's ocean resources.

 Marine Region—California Department of Fish and Game http://www.dfg.ca.gov/mrd

Program to address marine biodiversity issues along California's coast. Site provides information about marine life management, regulations and enforcements, permits, and reports on identification, biology, and conservation of marine life.

 California Ocean and Coastal Environmental Access Network http://ceres.ca.gov/ocean

A Web-based virtual library for the discovery of and access to data, information, and tools to support ocean and coastal resource management, planning, research, and education. Cal OCEAN is a project of the California Resources Agency's Ocean Resources Management Program.

 Southwest Fisheries Science Center—NOAA Fisheries http://swfsc.nmfs.noaa.gov/gen\_info.htm

One of six regional NOAA fisheries research centers. The Center conducts fisheries and marine mammal research at three laboratories in California in support of the Pacific Fishery Management Council.

 Marine Conservation Biology Institute http://www.mcbi.org/index.html

habitats.

A nonprofit scientific and conservation advocacy organization to protect and restore marine life on the West Coast and other coasts using scientific research and training, integrating science and policy, conducting policy research, educating the public, and building partnerships to solve problems affecting marine life and people.

California's Living Marine Resources: A Status Report
 http://www.dfg.ca.gov/mrd/status/index.html
 Descriptions of marine ecosystem, including stressors, regulations, human activities in marine ecosystem, and marine law enforcement. Species-specific descriptions (history of fishery, status of scientific knowledge) for marine and estuarine invertebrates, fish, birds, mammals, plants and

#### Marine Birds

- Southern Pacific Shorebird Conservation Plan http://www.prbo.org/cms/index.php?mid=212&module=browse
   A conservation plan to guide the provision of adequate, high-quality shorebird habitat to restore and maintain California's shorebird populations.
- California Current Marine Bird Conservation Plan
   http://www.prbo.org/cms/index.php?mid=66&module=browse
   A conservation plan that addresses seabird conservation from an ecosystem perspective,
   synthesizing information on multiple species, multiple habitats, ecological interactions, and the issues and threats that affect the health of seabirds, their prey, and their ocean environments.
- Seabird Conservation Plan—U.S. Fish and Wildlife Service http://migratorybirds.pacific.fws.gov/Seabird\_Conservation\_Plan\_Document\_pdf\_files.htm A plan that identifies the USFWS priorities for seabird management, monitoring, outreach, planning, and coordination. It provides profiles of each species (population size and status, ecology, habitats, threats, and recommended conservation actions), and a summary of current management, monitoring, and outreach efforts.

#### Marine Mammals

- U.S. Pacific Marine Mammal Stock Assessment Reports—NOAA Fisheries
   http://swfsc.nmfs.noaa.gov/PRD/PROGRAMS/CMMP/default.htm
   Information about the distribution, abundance, population trends, human-caused mortality, and the potential biological removal (PBR) of each stock.
- Coastal Marine Mammal Program—NOAA Fisheries
   http://swfsc.nmfs.noaa.gov/PRD/PROGRAMS/CMMP/default.htm

   Program that tracks the abundance and distribution of marine mammals on the U.S. West Coast out to 300 nautical miles.
- Southwest Fisheries Science Center—NOAA Fisheries
   http://swfsc.nmfs.noaa.gov/PRD
   Program that conducts applied research on the cetaceans, pinnipeds, and sea turtles of the eastern Pacific Ocean.
- Marine Mammals—NOAA Fisheries
   http://www.nmfs.noaa.gov/pr/species/mammals
   Information about marine mammal legal status information, wildlife viewing guidelines, and congressional reports.

#### Marine Nearshore Fish

- Coastal Pelagic Species Fishery Management Plan—Pacific Fishery Management Council
  http://www.pcouncil.org/cps/cpsfmp.html
   Plan that describes management and research actions and harvest policies for the entire coastal
  pelagic species fishery along the U.S. West Coast, including Pacific sardine, Pacific mackerel,
  market squid, and northern anchovy.
- Nearshore Fishery Management Plan—California Department of Fish and Game http://www.dfg.ca.gov/mrd/nfmp/index.html
   Management plan for nearshore fisheries on the California Coast, including life history, status of harvesting, management measures, research needs, and implementation actions.
- Pacific Coast Salmon Plan—Pacific Fishery Management Council
   http://www.pcouncil.org/salmon/salfmp/fmpthrua14.pdf

   Plan provides information about management objectives, harvest goals, and data needs for
   commercial and recreational salmon fisheries off the coasts of Washington, Oregon, and California.
- Pacific Fishery Management Council
   http://www.pcouncil.org
   One of eight U.S. regional fishery management councils, with responsibility for fisheries off the coasts of California, Oregon, and Washington. Site provides information about Council activities, marine reserves, research and data needs, regulatory information and species-specific info such as management plans, assessment reports, and life history. Fisheries include ground fish, salmon,
- Southwest Region—National Marine Fisheries Service
   http://swr.nmfs.noaa.gov
   Information concerning the management, regulation, harvesting, conservation, and protection of California's marine resources, including marine fish, invertebrates, and anadromous fish.

#### Marine Invertebrates

- Marine Invertebrates and Plants—NOAA Fisheries
   http://www.nmfs.noaa.gov/pr/species/invertebrates
   Information about marine invertebrates and plants listed, candidates for listing, or species of concern under the Endangered Species Act.
- Life History Information for Selected California Marine Invertebrates and Plants http://www.dfg.ca.gov/mrd/table\_inv\_ip.html

highly migratory species, coastal pelagic species, and halibut.

 San Francisco Bay Marine Invertebrates Bibliography http://www.calacademy.org/research/library/biodiv/biblio/sf\_marine\_invert.htm Online summary from California Academy of Sciences of Internet links, books, and articles on marine invertebrates in San Francisco Bay and on the California coast.

California Abalone Recovery and Management Plan
 http://www.dfg.ca.gov/mrd/armp/index.html
 A plan for all abalone species in California, including the recovery of depleted populations in Southern California and the management of the Northern California populations.